> Science runs far deeper, quirkier and at more fully human levels than we would think from stories of relentless discoveries, spectacular phenomena or the cool application of a fixed methodology. We know better than to swallow an inadequate narrative that portrays science as simply replacing an ancient world of myth and superstition with a modern one of fact and comprehension. Science, as we have framed it with a broader and older "love of wisdom of natural things," does indeed call on a growing illumination of nature of experiment and imagination, creating understanding where there was none before and opening up the exploration of new phenomena … But science also emerges from an ancient longing, and from an older narrative of our complex relationship with the natural world. Its primary creative grammar is the question, rather than the answer. Its primary energy is imagination rather than fact. Its primary experience is more typically trial than triumph. (p. 102)

How, then, do science and faith relate? He suggests that there have been three distinct approaches to their relationship, all of which he finds inadequate. The first is to declare them competitors in the search for ultimate explanations about the nature and meaning of the universe. This is the approach favored by the "new atheists" such as Richard Dawkins and also by religious fundamentalists. He finds that in such a "conflict" approach both parties tend to be triumphalist about their own truth claims and both tend to misrepresent the aims and assumptions of the other.

A second approach is to divide faith and science into two entirely different fields of inquiry, and then to call offside when one encroaches on the other's territory. This is the "non-overlapping magisteria" option of Stephen Jay Gould. McLeish finds this overly limiting on both sides, as science must concern itself with matters of values, for instance, and, as his biblical overview repeatedly acknowledges, faith observes and probes the behaviors of the natural world.

A third approach "attempts reconciliation by comparative methodology, while keeping the objects of enquiry distinct" (p. 169). He specifically acknowledges the work of physicist-priest John Polkinghorne here, who has explicated on numerous occasions the overlapping epistemologies and methods of science and theology. McLeish suggests, though, that this has the effect of "reducing the universal scope of both narratives" (p. 169), and thus diminishes both.

His alternative is to offer his theology of science (he suggests that we would also benefit from a science of theology), and delineates some "common threads" from both narratives, including love, manifested in a mutual commitment to the task of reconciliation. He writes,

> Science becomes, with a Christian theology, the grounded outworking of the "ministry of reconciliation" between humankind and the world. Far from being a task that threatens to derail the narrative of salvation, it actually participates within it. Science is the name we now give to the deeply human, profoundly theological task of participating in the mending of our relationship with nature. (p. 209)

McLeish concludes with a chapter on "mending our ways," intended to offer practical suggestions on how to live out the relationship between science and faith that he offers here. In a brief epilogue he suggests that the New Testament story of conversation between Jesus and a Roman centurion can inculcate and elucidate the trust required to honor the respective authority found in each of these two enterprises.

It is doubtful that many scientists would instinctively understand themselves as philosophers of wisdom, as McLeish would have them do, much less agree that reconciliation is a primary object of their work. But what if they did? How could the relationship between humans and the natural world be transformed? And what if Christians were to perceive science as a vital aspect of our very human grappling with the questions generated by both the order and chaos of the material universe? What if we were to understand science as a source of wisdom and not merely as an object of contention? These hopes are addressed repeatedly in this journal on science and the Christian faith. If nothing else, perhaps McLeish has given us an opportunity to occasionally replace the "and" in such discussions with an "in."

Reviewed by Anthony L. Blair, President and Professor of Leadership and Historical Studies, Evangelical Theological Seminary, Myerstown, PA 17067.

THE TRUTH ABOUT SCIENCE AND RELIGION: From the Big Bang to Neuroscience by Fraser Fleming. Eugene, OR: Wipf and Stock, 2016. 221 + xvii pages, including bibliography and index. Paperback; $29.00. ISBN: 9781498223294.

The Truth about Science and Religion: From the Big Bang to Neuroscience is a literary buffet serving a bit of everything related to science and faith. Interested in a bit of cosmology, biology, history, philosophy, with a splash of theology? You have found the book for you. Fraser Fleming, a professor and Head of the Department of Chemistry at Drexel University in Philadelphia, writes in a subtle way about science and religion while treating them equally and respectfully. I waited patiently through the 221 pages for a sentence that began with "The truth about science

and religion is …," but of course this sentence never came. Instead, Fleming seems to let readers make that conclusion on their own.

The Truth about Science and Religion is based on Fleming's own personal notes and reflections that have withstood the critiques of colleagues, editors, and students in his classes. I see this book as being of particular interest to those in the latter category. Students, and seekers in general, will benefit from the broad overview and discussion of numerous topics at the intersection of faith and science. In addition, the discussion questions and the reading suggestions at the end of each chapter are excellent inclusions for a reader who may want more. This book is not written for someone who wants an in-depth discussion of faith and a particular scientific field; rather, it is for someone who wants a bit of everything. I think this book accomplishes what Fleming states in the introduction:

> This book is intended to stimulate personal reflection more than provide an intellectual exercise, furnishing knowledge for personal reflection that in turn challenges core beliefs and provokes changes in behavior. (p. xvii)

After a brief introduction, the book is divided into eight chapters and concludes with an epilogue. I appreciate the chronological organization, from explorations of the Big Bang through to the evolution of *Homo sapiens* and our pursuit of science and purpose. Chapters 1 through 4 discuss the formation of the planet and people prior to Jesus. I appreciate the mix of physics, chemistry, and biology in these chapters. However, I must point out a few biological overgeneralizations. One example is the characterization of all macromolecules as polymers (p. 39). While it is true that nucleic acids, proteins, and carbohydrates are polymers, lipids often lack similar repeating units and thus are not polymers. Another biological error is the statement that the Golgi apparatus synthesizes proteins (p. 40). While the Golgi can modify and sort proteins, ribosomes synthesize them. These small overgeneralizations are easily forgotten as the reader finds beautiful poetic sentences such as "Plants and animals whose skeletons become compressed in sandy sediment create a book whose pages are read by sequentially dating each individual layer" (p. 58).

Chapters 5 through 7 focus on Jesus and the science and religion debate that ensued throughout history. Chapter 5 stood out from the rest of the book as it told the story of salvation and divine power from a scientific standpoint with references to things such as chromosomes (p. 95), wave amplification (pp. 100–101), chaos theory (pp. 105–6), and atoms (p. 110). Chapter 6 is by far the longest chapter of the book, and tells of the complex relationship between science and religion throughout history, beginning with the Egyptians and Babylonians. It is always encouraging to read of the times when the two had, and can continue to have, a mutually beneficial interaction. The subsequent discussion focuses on the organ which gives us the intelligence to pursue such scientific endeavors, the brain. I thought that this chapter offered particularly insightful reflection on the confusing link between the brain, mind, and soul.

The last chapter (8) ends the book on an appropriate note, a discussion of the meeting and relevance of science and faith. Fleming subtly nods toward the general theme of his writing: science points out that the "universe seems endowed with a weighed beneficence" (p. 203). Fleming writes in the epilogue that he looks retrospectively at chance events, both throughout evolutionary history and in his own life, and sees God at work. He sees chance as providential. A scientist may look at the remarkable formation of the universe, macromolecules, cells, and higher cognitive beings and see nothing but chance and luck. In contrast, someone looking from both the science and faith perspectives will see God at work in those improbable and somewhat miraculous events.

Throughout *The Truth about Science and Faith*, Fleming draws interesting parallels between the microscopic and the macroscopic. Firstly, he mentions that humans are perfectly positioned to study both as we are at the approximate mean size between the universe and the atom (p. 9). Secondly, Fleming states that there are approximately the same number of stars in the Milky Way galaxy as there are cells in the human brain (p. 171). At first glance these parallels are interesting, but at second glance I realized the awe-inspiring nature of those statements. Is it by divine providence that we are at the perfect size to look both outward at the billions of stars in our galaxy and inward to the billions of cells in our brains? What a beautiful creation awaits our scientific study!

Reviewed by Rebecca Dielschneider, Assistant Professor of Biology, Providence University College, Otterburne, MB R0A 1G0.

As space permits, *PSCF* plans to list recently published books and peer-reviewed articles related to science and Christian faith that are written by our members and brought to our attention. To let us know of such works, please write to patrick.franklin@prov.ca.